

PIPELINE RECIRCULATION FOR DATA MISPREDICTION IN A FAST-LOAD DATA CACHE

ABSTRACT OF THE DISCLOSURE

A system and method in a computer architecture for selectively permitting data, such as instructions, in a pipeline to be executed based upon a speculative data load in a fast-load data cache. Each data load that is dependent upon the load of a specific data load is selectively flagged in a pipeline that selectively loads, executes, and/or flushes each data load, while the fast-load data cache speculatively loads one or more data loads. Upon the determination of a misprediction of a speculative data load, the data loads flagged as dependent on the mispredicted data load are not used in the one or more pipelines, and are alternately flushed.

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